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<u>Patent No. Serial No. Patent Date US Filing Date Confirmation No. Attorney Docket No.</u>

7,279,711 B1 09/435,154 10/09/2007

11/08/1999

4834

SEL 142

Respectfully Submitted,

Mark J. Murphy Registration No. 34,225

Date: January 9, 2008

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Customer No: 26568



# (12) United States Patent

Yamazaki et al.

US 7,279,711 B1 (10) Patent No.: (45) Date of Patent: Oct. 9, 2007

(54)	FERROELECTRIC LIQUID CRYSTAL AND GOGGLE TYPE DISPLAY DEVICES					
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(*)	Notice:	Subject to any disclaimer, the term of this patent is extended or adjusted under 35 U.S.C. 154(b) by 0 days.				
(21)	Appl. No.: 09/435,154					
(22)	Filed:	Nov. 8, 1999				
(30) Foreign Application Priority Data						
	ov. 9, 1998 ov. 17, 1998					
(52)		04 (2006.01) 76 (2006.01) 01 (2006.01) 				
(58)		Classification Search				
	See appli	cation file for complete search history.				

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#### ABSTRACT

The present invention relates to a semiconductor device including a circuit composed of thin film transistors having a novel GOLD (Gate-Overlapped LDD (Lightly Doped Drain)) structure. The thin film transistor comprises a first gate electrode and a second electrode being in contact with the first gate electrode and a gate insulating film. Further, the LDD is formed by using the first gate electrode as a mask, and source and drain regions are formed by using the second gate electrode as the mask. Then, the LDD overlapping with the second gate electrode is formed. This structure provides the thin film transistor with high reliability.

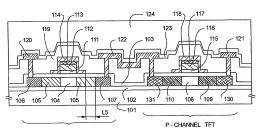
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### 20 Claims, 35 Drawing Sheets



N - CHANNEL TFT